"Made available under NASA sponsorship in the interest of early and wide dissamination of Earth Resources Survey Program information and without liability a for any use made thereof."

E7.4-10.727 ce 139573

BOLIVIAN PARTICIPATION IN THE RESEARCH AND ANALYSIS

OF EARTH RESOURCES EXPERIMENT (EREP)

(E74-10727) BOLIVIAN PARTICIPATION IN

THE RESEARCH AND ANALYSIS OF EARTH
RESOURCES EXPERIMENT (EREP) (Servicio
Geologico de Bolivia, La Paz.) 4 p HC

\$4.00

CSCL 08B G3/13 00727

SR-571 DECEMBER-MARCH PERIOD

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

Dr. Carlos E. Brockmann.
PRINCIPAL INVESTIGATOR.
SERVICIO GEOLOGICO DE BOLIVIA.
Casilla 2729

La Paz, Bolivia.

#### 1.0 INTRODUCCION

Several national institutions are working in the ERTS-BOLIVIA Program. Each one of them is responsible for their specific research work. For instance, the Militar Geographic Institute is in charge of the researches for the use & application of the S 190 photographs from the cartography point of view. The Geological Service of Bolivia will apply these photographs to the geological and geomorphological study. The Mining Corporation of Bolivia will be in charge of the reconnoisance and mapping of the mineral zones. The Agriculture Department will be in charge of the soil classification, soil potential use and forestry mapping.

In order to start the Research Program with the S 190 A experiment photographs, the respective copies have been done by contact on paper. They were given to some subprograms due to the excessive work we have with the ERTS images. Eventhough this difficulty, some research work has been started as follows:

## 2.0. MULTIDISCIPLINARY PROGRAM

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

## 2.1. Cartography

After the evaluation of the S 190A photographs characteristics and considering the fact that these are actually photomaps, it was decided to prepare the correspondent map on 1:50.000 scale using the existent control points of the Santa Cruz area (city area), once the car tographic product quality is finished and proved, studies will be beginned to prepare another similar map of Trinidad, wich would be the first cartographic map of that region.

# 2.2. Geology

Since the majority of the personnel is still working with the final part of the ERTS images interpretation, the geology work has not been done with the necessary speed. Although considering the SL-2 and S 190 A photographs scope, the work would be reduced exclusively to the petreleum exploration, as the main oil fields of Bolivia are in the Santa Cruz area.

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

## 2.3. Agronomy

The band evaluation study and band evaluation work were related to the forestry mapping application, which is in the developing stage.

#### 2.4. Hydrology

Using positively the S 190A photograph big scope, these photographs were taken to study the water-course changes of the Mamoré River. It has been found that the existent maps have errors due to the methods used in the mapping in relation to the SL-2 photographs. At the same time the photographs were used to correct the water-course changes in some regions.

## 3.0 RESEARCH

- 3.1. The SL-2 photographs evaluation study has been completed in order to prepare the Santa Cruz photomap.
- 3.2. It was considered the fact of making SL-192 experiment study with LARS-PURDUE of U.S.A. Since Bolivia does not have the necessary equipment to make this research.

REPRODUCIBILITY OF THE ORIGINAL PAGE IS POOR

## 4.0 CONCLUSIONS

The SL-2-190A photographs are considered as having a great use potential, reason why the proposed research program will be speeded.